# New Records of Bees (Hymen.).

By T. D. A. Cockerell, Boulder, Colorado.

Xylocopa orpifex Smith.

Knight's Valley, California. British Museum (506—84, 73.)

Xylocopa arizonensis Cresson.

Lake County, California; both sexes (O. T. Baron). Brit. Museum.

Alcidamea simplex (Cresson).

Trenton Falls, New York (E. Doubleday); from F. Smith's collection; two males, Brit. Museum.

#### Hypanthidium aureocinctum sp. n.

♀ Length a little over 7 mm., moderately robust; head and thorax densely punctured, black, marked with yellow; clypeus, mandibles (except apical margin), malar space, cheeks, a broad band across hind part of vertex (continuous with yellow of cheeks), broad bands at sides of face (extending to top of eyes), and a large U-shaped mark between antennæ, all chrome yellow; region between antennæ somewhat elevated; black of front extending downward to top of clypeus as a narrow band on each side; scape and base of flagellum light orange-ferruginous; rest of flagellum also ferruginous, but more dusky; occiput black; prothorax black, but tubercles tipped with yellow; pleura mainly yellow; mesothorax with a narrow yellow (reddishtinted) margin on each side and in front, except about the middle fifth in front, where the bands are connected with narrow stripes extending backward over the mesothorax; scutellum projecting, emarginate in middle, the apical margin, with the axillæ, broadly chrome yellow; metathorax black, dull, the base with a series of pits; hair of head and thorax pale yellowish, scanty; tegulæ dull orange, ferruginous in middle; wings dusky, strongly so in costal region; second r. n. going well beyond second s. m.; legs yellow, the femora and tibiæ marked with ferruginous; no pulvilli; abdomen strongly punctured, the punctures large on the basal half of the segments, small and dense on the apical part; the segments black at base, broadly ferruginous at apex, each with a very broad entire chrome yellow band, which is not notched sub-laterally or in the middle; on the first segment the band bends sharply at its ends, sending a short process along the sides; the fifth and sixth segments appear all yellow, except that the fifth is obscurely ferruginous apically, and the sixth has a subapical dark interrupted band; ventral scopa yellowish-white.

Hab.—Mexico (F. Smith's collection, 79-22). Brit. Museum. This is the first Hypanthidium north of Panama. I was at first inclined to think that it might be the undescribed male of Anthidium bivittatum Cresson, but I believe bivittatum is a Dianthidium, and the differences indicated on comparison with Cresson's description can hardly be all due to sex. H. aureocinctum is not very closely related to its South American relatives, but it is seen on comparison to be of the same general type as H. flavomarginatum (Smith). In Friese's table (Das Tierreich) is runs nearest to Dianthidium apicale, from which it differs in many details.

## Panurginus cressoniellus calochorti Cockerell.

Cripple Creek, Colorado, July 27 and 31, 2 9, 58 (S. A. Rohwer). Both sexes at flowers of Potentilla: males also at Pentstemon and Geranium. The male does not differ from that of typical cressoniellus. The altitude of the locality is 9590 ft. A study of a series of New Mexico females of cressoniellus indicates that calocharti is not more than a variety, certainly not a subspecies. Specimens from Beulah, August 18 (W. Porter), hill above Beulah, August 19 (W. Porter), Harvey's Ranch, August 22 (Porter and Ckll.), and Viveash Ranch, 9000 ft., July 21 (Ckll.), all have dark antennæ and belong with calochorti. Specimens from west of Beulah. August 23 (W. Porter) and top of Las Vegas Range, June 20 (Ckll.) have the flagellum red beneath. Thus there is no evident relation between altitude and the color of the antenna. Sometimes the first r. n. enters the basal corner of the second s. m.

# Panurginus verus Cockerell.

Upon comparison of the female types, it is seen that this is very close to *P. cressoniellus calochorti*. Aside from the difference in the recurrent nervure, *P. verus* has the deeper marginal cell rounded instead of angled at its upper apical corner, and the second abdominal segment (exclusive of the apical depression) more closely and evidently punctured. The last character is a variable one in *cressoniellus*. I incline to the opinion

that verus is after all a variety of cressoniellus. This idea receives support from the fact that additional specimens of P. verus show much variation, while the males do not appear to differ from those of P. cressoniellus except in venation. A male verus from Beulah, N. M. (July 27, Cockerell) has the wings unusually reddish. Both sexes (one pair united) were taken by Mr. S. A. Rohwer at Topaz Butte, Colorado, at flowers of Drymocallis fissa, June 23 and 30, 1907. All things considered, I believe we ought to write P. cressoniellus verus.

### Panurginus bakeri (Cockerell).

Rio Ruidoso, White Mountains, New Mexico, prox. 6500 ft., August 4 ( Townsend).

### Panurginus neomexicanus Cockerell.

Beulah, New Mexico, August 18, & (IV. Porter); Rio Ruidoso, N. M., prox. 7600 ft., at flowers of Solidago trinervata, August, & (Townsend).

### Panurginus boylei (Cockerell).

Las Vegas, New Mexico, males at flowers of *Meliotus alba* and *Sphaeralcea lobata*, August 9 (W. Porter).

### Panurginus pauper flavotinctus Cockerell.

Las Vegas, N. M., females, one at *Grindelia nuda*, August 14 (*IV. Porter*). The female is easily known from *P. nigrinus* Viereck by the very fine sculpture of the metathorax, with the margins of the basal enclosure shining.

# Panurginus innuptus Cockerell var. absonus v. n.

3. With a rather large supraclypeal spot; stigma and nervures dark reddish brown. Easily known from *P. rudbeckiae* (Rob.) by the broadly truncate lateral face marks and the thicker flagellum. Pecos, New Mexico, August (W. P. Cockerell). I believe that comparison of types will show that *P. innuptus* is identical with *P. picipes* (Panurgus picipes Cresson).

# Panurginus illinoiensis (Cresson).

Males from Fedor, Texas, April 2 and 21 (Birkmann), which I had doubtfully labelled as a variety of P. renimaculatus, prove to be entirely distinct from that species, and to agree with P. illinoisensis, although the wings are paler and the tibiæ show more yellow than in a specimen from Vir-

ginia. The flagellar joints are broader than long, and the process of the labrum is characteristic, being extremely broad, with a practically straight edge (not emarginate as in *rudbeckiae*), its color pale yellow, with the edge dark.

#### Panurginus picitarsis n. n.

Panurginus picipes Morawitz, Hor. Soc. Ent. Ross., xxiv (1890) p. 358.—China. Not P. picipes (Cresson 1872).

#### Panurginus labrosiformis distractus subsp. n.

& Length about 5 mm.; like P. rudbeckiae (Rob.), differing thus: smaller; b. n. barely falling short of t. m. (falling considerably short in rudbeckiae); the long and slender flagellum pale yellowish-red beneath, except at base and apex; the broad-triangular process of labrum with a narrow truncate (not emarginate) apex, wholly different from the broad, emarginate process of rudbeckiae. As in P. rudbeckiae, the clypeus has a median groove. This agrees with P. labrosiformis Rob. in the narrowed process of labrum, and the impressed lines on the mesothorax; but the antennæ are long and slender and the wings are quite strongly dusky. The supraclypeal spot is a mere point. The second and third abdominal segments have the depressed basal part dull, while the apical part is shining, with distinct minute punctures; in this the insect resembles P. asteris. Another similar species is P. bidentis (Ckll.); this has the process of labrum strongly emarginate.

Hab.—Lincoln, Nebraska, August (L. Bruner, 9). Very likely a distinct species, but I describe it as a sub-species of labrosiformis (which I know only from description), as it seems to nearly agree in structure. In the table of Nebraska Panurginus in Ent. News, May, 1907, p. 184, it runs to P. renimaculatus, which has the process of labrum deeply emarginate.

#### Exomalopsis zexmeniae sp. n.

Exomalopsis pulchella Cockerell, Ann. Mag. Nat. Hist., July, 1912, p. 29 (not of Cresson).

Very like *E. pulchella* Cresson, but the receipt of a series of genuine *pulchella* (from Liguanea Plain, Jamaica; *C. T. Brues*) shows that the Guatemalan species (type from Quirigua, at flowers of *Zexmenia*; *W. P. Cockerell*) is distinct by its rather larger size, black (instead of fulvous) hair of scutellum; more strongly punctured clypeus, but especially by the very large knee-plate of hind legs, that of *pulchella* being very small.